

WEST☐

Generate Collection

Print

L16: Entry 2 of 3

File: USPT

Oct 22, 1996

DOCUMENT-IDENTIFIER: US 5567612 A

**** See image for Certificate of Correction ****

TITLE: Genitourinary cell-matrix structure for implantation into a human and a method of making

Abstract Text (1):

Methods and artificial matrices for the growth and implantation of urological structures and surfaces are disclosed in which urothelial cells are grown in culture on biodegradable, biocompatible, fibrous matrices formed of polymers, such as polyglycolic acid, polylactic acid, or other polymers which degrade over time. The cells can be cultured in vitro until an adequate cell volume and density has developed for the cells to survive and proliferate in vivo. Alternatively, when adequate cell numbers for implantation are available, the cells can be attached to the matrix and implanted directly, without proliferation in vitro. The implants approximate the desired urological structure to be replaced or repaired, such as the kidney, urether, bladder, urethra, and the like. Implantation is followed by remodeling through cell growth and proliferation in vivo. In another aspect of the invention, techniques are disclosed for selectively extracting or harvesting urothelial cells either from excised urological tissue in vitro or from intact urological tissue in vivo by treating the tissue with a digestive enzyme, such as collagenase.

WEST

Generate Collection

Print

L18: Entry 24 of 38

File: USPT

Nov 25, 1997

DOCUMENT-IDENTIFIER: US 5690670 A

TITLE: Stents of enhanced biocompatibility and hemocompatibility

Brief Summary Text (8):

For synthetic mechanical cardiovascular devices, properties such as the surface finish, flow characteristics, surface structure, charge, wear, and mechanical integrity all play a role in the ultimate success of the device. For example, typical materials used for balls and discs for heart valves include nylon, silicone, hollow titanium, TEFLON.TM., polyacetal, graphite, and pyrolytic carbon. Artificial hearts and ventricular assist devices are fabricated from various combinations of stainless steel, cobalt alloy, titanium, Ti-6Al-4V alloy, carbon fiber reinforced composites, polyurethanes, BIOLON.TM. (DuPont), HEMOTHANE.TM. (Sarns/3M), DACRON.TM., polysulfone, and other thermoplastics. Pacers, defibrillators, leads, and other similar cardiovascular implants are made of Ni-Co-Cr alloy, Co-Cr-Mo alloy, titanium, and Ti-6Al-4V alloy, stainless steel, and various biocompatible polymers. Stents and vascular grafts are often made of DACRON.TM. stainless steel or other polymers. Catheters and guide wires are constructed from Co-Ni or stainless steel wire with surrounding polymer walls.

WEST**End of Result Set**

Generate Collection

Print

L19: Entry 2 of 2

File: USPT

Nov 19, 2002

DOCUMENT-IDENTIFIER: US 6482444 B1

TITLE: Silver-containing, sol/gel derived bioglass compositions

Abstract Text (1):

Silver-containing, sol-gel derived bioactive glass compositions and methods of preparation and use thereof are disclosed. The compositions can be in the form of particles, fibers and/or coatings, among other possible forms, and can be used, for example, for treating wounds, improving the success of skin grafts, reducing the inflammatory response and providing anti-bacterial treatments to a patient in need thereof. Anti-bacterial properties can be imparted to implanted materials, such as prosthetic implants, sutures, stents, screws, plates, tubes, and the like, by incorporating the compositions into or onto the implanted materials. The compositions can also be used to prepare devices used for in vitro and ex vivo cell culture.

WEST

Generate Collection

Print

L1: Entry 20 of 33

File: USPT

Sep 21, 1993

DOCUMENT-IDENTIFIER: US 5246530 A

**** See image for Certificate of Correction ****

TITLE: Method of producing porous metal surface

Brief Summary Text (5):

It is well-known in the medical implant art to provide a porous surface on selected areas on a medical prosthesis to permit the bone cement, or ideally the bone itself, to penetrate the voids in the surface in order to establish and maintain a strong mechanical bond with the implant. A frequently employed technique for creating such an active implant surface area involves the selective placement of a porous coating on the implant device. The most commonly used porous coatings are gravity or pressure sintered spherical powders, diffusion bonded metal fibers and plasma sprayed powder coatings. Exemplary of such sintered metal powder coatings are those described in our U.S. Pat. Nos. 4,612,160 and 4,854,496.

Brief Summary Text (6):

Titanium and titanium alloys have experienced wide usage as medical implant materials, especially for medical prostheses such as orthopedic devices in the form of knee and hip joints. Diffusion bonded metal fiber coatings have been produced from titanium wire in the form of random porous fiber metal coatings. Likewise, in plasma sprayed coatings, it is also known to utilize either commercially pure titanium or titanium alloy powders. The desirability of producing porous surfaces on medical prosthetic devices is well-known as seen, for example, in U.S. Pat. No. 3,855,638 to Pilliar, U.S. Pat. No. 3,605,123 to Hahn, U.S. Pat. No. 4,017,911 to Kafesjian and U.S. Pat. No. 3,808,606 to Tronzo.